

# STRUCTURING HISTORIC SIGNS AND ENCLOSURES IN THE URBAN FORM: A CO-EVOLUTIONARY STRATEGY THE PAGODA RELIGIOUS SITE IN THE MODERN XI'AN

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## ABSTRACT

*Surviving Chinese heritage sites are threatened by inappropriate urban regeneration projects. Paradoxically, the listing of the Small Wild Goose Pagoda in the World Heritage list (2014) represents a major threat fostering an unprecedented tourism-led commercial exploitation of the site.*

*Recognized as a representative of the Silk Roads, this Pagoda also reflects urban culture under the Tang Empire while defining a clear typo-morphological structure in the urban li-fang which urban significance exceeds the religious enclosure to shape one Chinese form of "public" and collective socializing space.*

*The vague definition of heritage's 'setting' and the lack of methodological tools related to urban analysis in the China Principles may explain how incongruous developments could be proposed around the UNESCO site, along with the inadequacy of concepts such as the 'demarcation line' of heritage sites, 'buffer control zone', and 'development zone'.*

*The new archaeological finds suggest the underground urban structure still underlying the modern city while a parataxis of morphologies have filled the ancient block, preserving it from the surrounding generic city built on the tabula rasa of pre-existing historic signs.*

*The Pagoda's enclosure, its scattered vestiges along with the urban block require interpretation and a new role in the urban form and life. This paper reflects on the contribution of urban studies to define the object and scopes of preservation and enhancement as well as on the ontology of 'presentation' (UNESCO 2008) to support new interpretation and resignification of the Pagoda site in a richer narrative and urban culture.*

**Keywords:** *urban form, interpretation, presentation of historic site, resignification design, urban significance of religious site.*

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## INTRODUCTION

The Chang'an-Tian-shan Silk Road Corridor is one of the major arteries of the historic Silk Roads that opened up trade from China to Europe. Buddhism in particular was disseminated across western and central China, as witnessed by the construction of pagodas, temples, surrounding the corridor, which runs from Chang'an (Xi'an), in the Shaanxi province of northwest China. Small wild goose pagoda, as one of the component heritage sites in China, was recognized as a representative site for reflecting the urban culture and the religion of imperial power. <sup>1</sup>

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## PROBLEM STATEMENT

Today the setting of Buddhist heritage is vulnerable to high density urban development. It is shown by the land use intentions of previous master plans that urbanization has continuously eroded

historical site. The plots that were initially, in the first round plan, in 1953, conceived as green areas, combined the protection of the historic site with urban greenery plan.<sup>2</sup>

In Xi'an Master Plan (1980-2000), the second round of general planning of Xi'an, the residential function was introduced in the block area where the pagoda is located, at the north-east corner and south-east corner. A protection plan was also designated for the first time, setting buffer zone for this area, including the four main roads around the block.

In Xi'an Master Plan (1995-2010), the third round of general planning of Xi'an, the commercial function was included on three parts of the site, bringing a potential threat to the environment of cultural relics. A new protection plan, was compiled and it enlarged the buffer zone, and set restriction of 24m for new buildings in the buffer zone.

Comparing the previous master plans, it emerges that this area has been step by step planned partially as commercial and residential areas. The economic values are gradually going ahead of the cultural and social value. It is not until when the ruins were discovered, that the historical site arrived the opportunity of being re-planned.

This threat was also noted by the ICOMOS, when the site was proposed for world heritage list. In the Advisory Body's Evaluation Report (ICOMOS) for silk road, restrictions for new intervention are suggested as necessary. 'It considers that in order to allow the two pagodas (in Xi'an) to retain their dominance of the surroundings, height restriction need to be put in place and respected for the buffer zones.'<sup>3</sup> But the analysis bases for the height restriction are expected to be studied furtherly, and more precise measure need to be studied and defined for morphological transformation in the buffer zone.

In February 2016, the Xi'an Municipal Government convened a meeting to promote the planning and transformation of this area, accelerating the planning and reconstruction of this area.<sup>4</sup> The government expressed the intention of integrating the pagoda, the Xi'an Museum, Xi'an Hotel, Jianfu Temple, together with commercial property developing projects.

Under this situation, the proposal of methods of controlling the morphological feature of the site, is even more urgent. The transformation of the site partially as urban tourism commercial complex, driving the economic development, as shown in many cases, would also upset the atmosphere of the historic site, the authentic setting for the historic and archaeological vestiges. Commercial developings around the historic site are threatening the authenticity of the setting, in terms of overall layout and design ideology.

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## HISTORICAL SITE UNDERSTOOD AS DOCUMENTATION OF THE PALIMPSEST

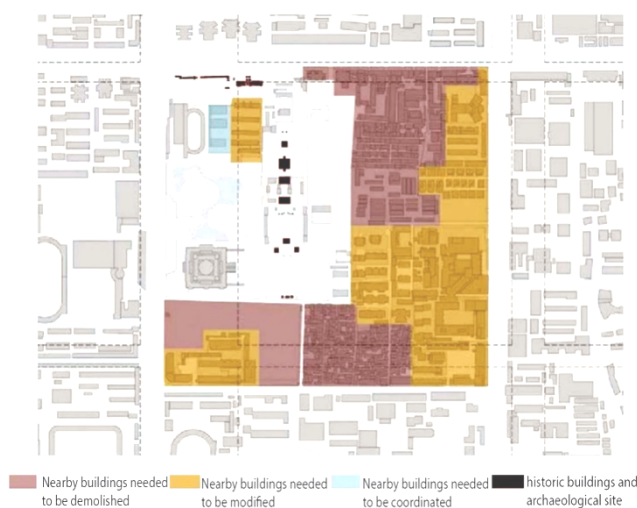
Keeping the authenticity of the site's context, does not mean that any intervention could be done. The existing living environment does have functional deficiencies and the infrastructure of urban parcels needs to be upgraded. These are all legitimate reasons for an intervention project. But the premise is that the requirements for protecting morphological elements should be followed.

In the end of 2019, the land expropriation came to an end, and large areas of low-quality buildings were erased from the site, since in the eyes of investors government officials, these buildings have no economic or cultural value. However, large-scale demolition activities have caused the surrounding environment to be blank, leaving large contextual void (fig.1, 2). This

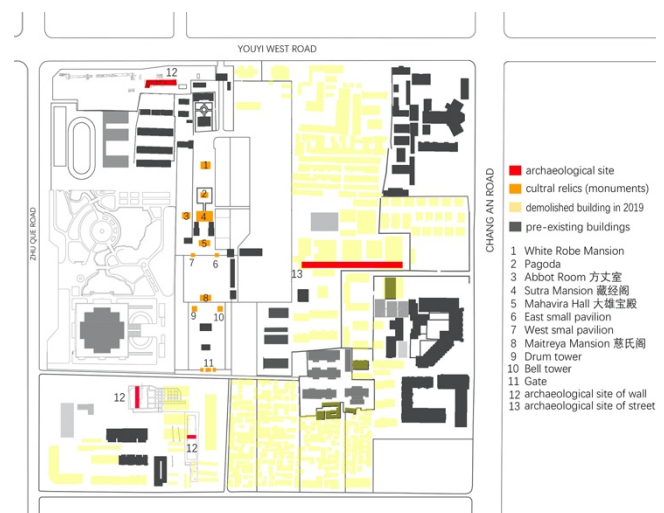
reality makes the small scale renewal to be impossible, another way of reconstructing the site's context should be explored.

In the same year, Marco Dezzi Bardeschi, reiterated the principles that should be followed for the projects around the historical site, from the views of both physical permanence preservation and contemporary intervention project. "In the project of protection/safeguard our responsibility is to respect, to the maximum care, the physical permanence without subjective selections, considering the context as a document-monument, a material autograph on which the entire rich process of usages - suffered by the fabric in its evolution and modifications over time - is overwritten (and readable). At the same time, the autonomy of the contemporary project is necessary, as a recognizable addition / integration that creates a close dialogue with history." <sup>5</sup>

History is the result of the superposition of various eras. It is not a pure original form, but a collection of fragments from various eras. Therefore, we should analyse the entire historical process experienced by the site, keep as far as possible all traces of its history, and integrate them into the new design.



**Fig.1 Schematic diagram for protection of the setting of historic area**



**Fig.2 Current situation in 2019**

In 2011, ICOMOS-CIVVIH<sup>6</sup>, The Valletta Principles also expressed the idea that...Elements to be preserved, should include urban pattern, the plots, the green spaces and the relationships between buildings and open spaces... Before any intervention, the existing context should be carefully analysed and documented. It also has taken into consideration the significant evolution in definitions and methodologies concerning the safeguarding of historic urban areas, to develop their tools, their attitudes and, in many cases, their role in the planning process. The modification, particularly in fast growing cities, takes into account the problems of large-scale developments, which alter the traditional lot sizes that help to define historic urban morphology. <sup>7</sup>

## HISTORICAL EVOLUTION OF THE SITE

The division of the historical site is the basic factor that determines its morphological characteristics. The subdivision of the site according to different periods depends on different determinants, such as

the boundary line between the different properties; the scale characteristics resulted by the construction rules of specific historical time; some boundary changes may also be affected by particular historical events.

Site partition has a considerable degree of stability. The situation of the site in different historical periods may seem quite different, but actually full of connections. The following paragraphs will indicate the influence of different factors on the characteristics of site partition with the real situation of this site in Xi'an.

The analysis of the evolution of site morphological characteristics needs to be traced back to the earliest 'original plan' for the site. About the urban planning, a mature 'Lifang system' (Lifang, ward or neighborhood block) has been established during the Sui and Tang Dynasties (618-907) in China. The general layout of the block can be understood on the basis of knowledge of the policy of the area, the transport system within the block, the methods of composition of the groups of buildings. 'Lifang system' is a top-down approach of designing a city, imaging the city in a grid system. In the sense of making land division based on a grid of orthogonal streets, it had the similar feature with 'centuriatio', the roman method of land delimitation and division, leaving the site with signs of historical planning.

It was usually a rectangle broken up into four more or less equal and rectangular areas, the size of this block was 514.5m x 514.5m (350T ). The neighbourhood block was surrounded by a wall, with moat water way circling around, two gates located at the west and east walls, as the main entries. According to the social status of the family, the house complex would obey to three types: 73.5m x 66.45m, 36.750m x 44.40m, 22.05m x 14.7m (45T x 50T, 25 x 30T, 10T x 15T).

This site the Pagoda is adjacent to the central axis of the capital city and was the important scenic point for the palace where the emperor lived. Among them, Jianfu Temple, located in this block, at the north west side is an important Buddhist temple for the capital city. This temple, together with the most important physical evidence of this temple, the small wild goose pagoda, was well preserved with awareness of prolonging the material as long as possible.

After Ming dynasty (1368-1644), the urban area shrank into the inner city area or city centre area. This block was gradually excluded from the urban area, and its role turned into a secluded Buddhist temple on the outskirts. This area gradually became less prosperous than before. The residential buildings of senior executives in Lifang were demolished and the materials were collected for constructing other buildings, and Lifang was gradually abandoned. Until the early 20th century, the surrounding area was still surrounded by a field of farmland.

However, from the maps of 1930s, 1950s, 1980s, we can still see the morphological relationship between the built elements and the original plan. Xiajia village formed spontaneously, in a bottom-up way, on the south side of the Buddhist temple, proved in the city's gazetteer in 1819. The red dash line shows the corresponding location of the Tang Dynasty's street.

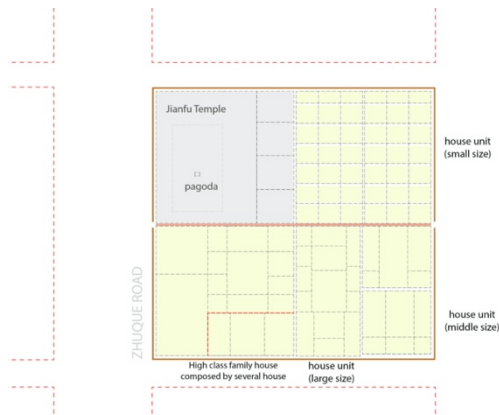


Fig.3 Street system and land partition in tang dynasty

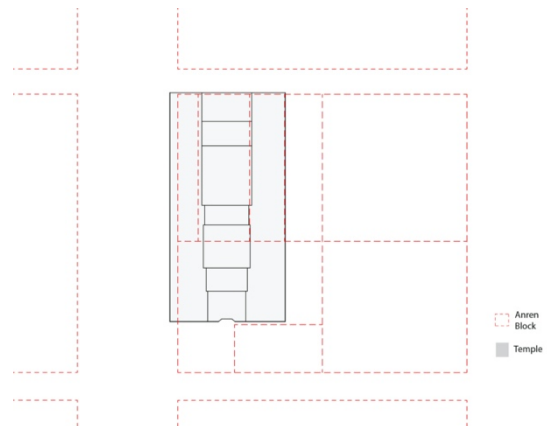


Fig.4 Street system and land partition in Ming dynasty

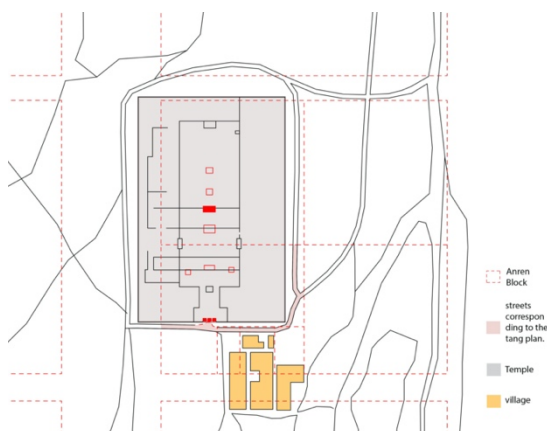


Fig.5 Street system and land partition in 1930s

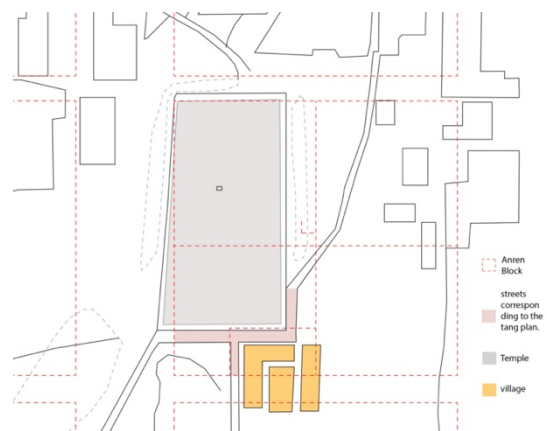


Fig.6 Street system and land partition in 1950s

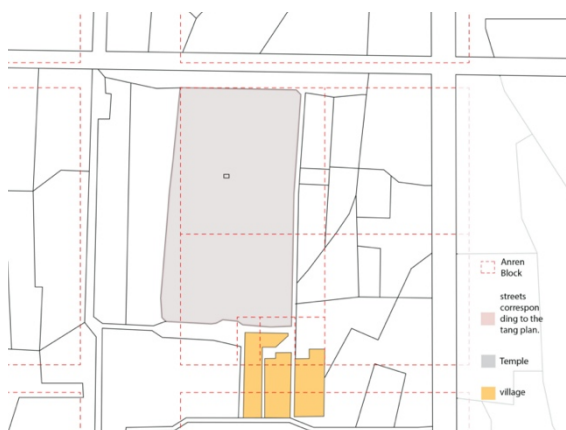


Fig.7 Street system and land partition in 1970s

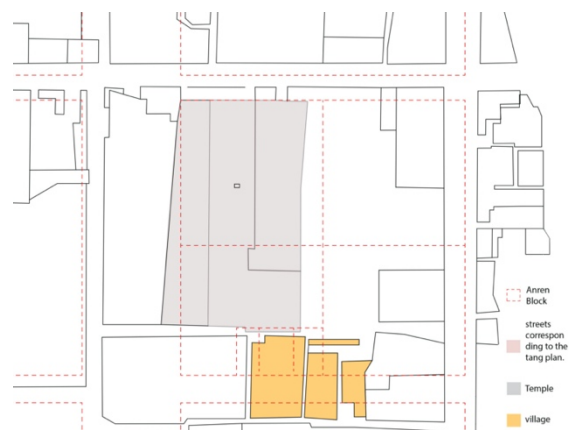


Fig.8 Street system and land partition in 1980s

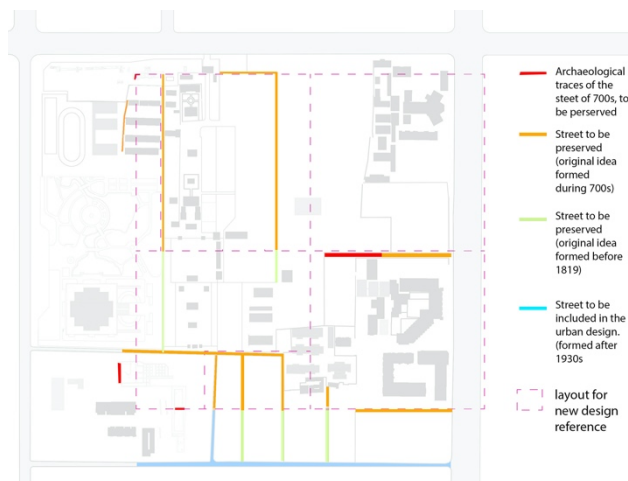
Why are these boundary elements still maintained after a so long historical evolution? Based on the evolution analysis, the results show that some important roads (red in the picture), or the borders of the monumental building complex and village, persisted during the history. Why these elements were kept unconsciously, and what is the importance of preserving these morphological features?

Even if lost inside the city, these iconic borders and road elements play an important role in identifying people's position and cognition of historical places. They have a similar role as that of the monuments, in the cognitive level of people, which form the memory of the site. Not only monumental buildings constitute the landmark system, but also the main roads, the boundary elements have the same role to allow people to recognize this site. The deletion of these elements in the new project represents a lack of respect for the characteristics of the site. For historical urban landscape (HUL), the continuation of urban morphological features constitutes the real object and content of the protection for urban historical site. Through the control of the newly-built buildings, the historical morphological characteristics (or the physiognomy) of the site are expected to be maintained, as stated in the previous conservation plans for the site. Although everyone simply indicates for each building the specific style referring to a historical period and its height. Without sufficient analysis foundation, simply controlling these two aspects cannot effectively intervene in the transformation of urban form.

After analysing the specific characteristics of the site, it is necessary to control the new building design in the site through the urban design method in order to ensure the regeneration and preservation of the characteristics.

## PROPOSING A KNOWLEDGE APPROACH AND CONCLUSIONS

Based on sufficient historical analysis, a series of strategic maps must be drawn, showing which morphological elements of the site need to be preserved, and which order lines should be respected as important reference for new design. The new design has a certain degree of autonomy, but it needs to be based on understanding the history of all site morphological informations, and to make reasonable design, rather than blindly copying the so-called original plan, historicizing the site, or blindly creating an autonomous project disregarding the historical information.



**Fig.9 Strategy maps series: in the map are shown the partition elements that need to be considered in new urban design**

In conclusion, the knowledge approach to urban historical development aims at considering the site not as a tabula rasa but in its layered structures: underground archaeological elements, constitutive morphotypes, layering of several historic periods and not only the original. The objective of rewriting sites, or overlapping the contemporary level, is to show that sites and cities are a unit that has chronological depth.

This contribution mainly analysed the influence of site partition and street system on the urban design, and other elements will be further analysed in other articles, such as strategy maps on building height, and so on.

The methodology it uses for making analysis and deduce urban design strategy would be more inspirational and valuable for cases in other places.



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#### ENDNOTES:

- <sup>1</sup> UNESCO World Heritage Sites, "Silk Roads: the Routes Network of Chang'an-Tianshan Corridor". <https://whc.unesco.org/en/list/1442/documents/>. Accessed 2014-06-23.
- <sup>2</sup> Master Plan (1953-1972) The First Round of General Planning of Xi'an City. Archive of China Urban Planning and Architectural Design Research Institute. 1953.
- <sup>3</sup> ICOMOS. Advisory Body Evaluation Report for 'Silk Roads: the Routes Network of Tian-shan Corridor (China, Kazakhstan, Kyrgyz Republic) No 1442'. <https://whc.unesco.org/en/list/1442/documents/>. Approved 2014-03-06.
- <sup>4</sup> <http://www.xa.gov.cn/gk/zcfg/szgg/5d49132465cbd87465a7c4db.html>
- <sup>5</sup> Marco Dezzi Bardeschi. "Conservare, non restaurare." ANANKE 86. 2019.
- <sup>6</sup> CIVVIH: International Committee on Historic Towns and Villages
- <sup>7</sup> The Valletta Principles for the Safeguarding and Management of Historic Cities, Towns and Urban Areas, Adopted by the 17th ICOMOS General Assembly on 28 November 2011. Available: [https://www.icomos.org/Paris2011/GA2011\\_CIVVIH\\_text\\_EN\\_FR\\_final\\_20120110.pdf](https://www.icomos.org/Paris2011/GA2011_CIVVIH_text_EN_FR_final_20120110.pdf)

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- UNESCO World Heritage Sites, "Silk Roads: the Routes Network of Chang'an-Tianshan Corridor". <https://whc.unesco.org/en/list/1442/documents/>. Accessed 2014-06-23.

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#### LIST OF ARCHIVAL OR DOCUMENTARY SOURCE:

- Fig 1: Xi'an City Planning and Design Institute. 'Protection and Management Plan for Chang'an City Site (The Small Wild Goose Pagoda Part)'. Application Document of Silk Road as World Heritage – - Protection and Management Planning of Chang'an City Site (The Small Wild Goose Pagoda Part)

Fig.2: redrawn by the author based on information from Google Map, Xi'an urban planning bureau.

Fig.3: HE Wenxuan, HE Congrong. 'Architectural Layout in Anren Ward, Tang Chang'an City.' *Journal of Chinese Architecture History*, 2018(01).

Fig.4: Map engraved on 'Stele of Imperial Edict' (1432), collected in Jianfu temple.

Fig.5: Geographic Information Surveying and Mapping Bureau of Shaanxi Province.

Fig.6: Archives of Urban Construction in Xi'an.

Fig.7: [www.USGS.gov](http://www.USGS.gov).

Fig.8: Xi'an Beilin District People's Government Office of the names. *Xi'an Beilin District Gazetteer*. Xi'an second printing Publication. 1982.

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